Perceived Discrimination Among Ethnic Minority Young People: The Role of Psychological Variables

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Because of difficulties in objectively determining discrimination, attention has turned to individual differences in perceptions of discrimination. This study aimed to build on such work by investigating the role of psychological variables in predicting perceived discrimination (PD) in a UK sample of ethnic minority young people (n = 154). A series of multiple regression analyses yielded 3 pathways leading to PD. There was a direct effect of gender on PD. Depression and low self-esteem and need for approval predicted anxiety, which in turn was related to higher PD. Finally, private collective self-esteem correlated with public collective self-esteem, which in turn predicted lower PD. The results point to the importance of psychological variables, both personal and collective, in the perception of ethnic discrimination. Furthermore, the findings enhance our understanding of the complex associations between self-esteem, affect, and PD.

A review of the literature on prejudice and discrimination reveals what Branscombe, Schmitt, and Harvey (1999) describe as a psychology of the powerful. Research has tended to focus on members of dominant social groups, the sources rather than the targets of prejudice. Topics include characteristics of racism, cognitive and motivational mechanisms that create and sustain prejudice, and methods of reducing prejudice and eliminating discrimination (Swim & Stangor, 1998). Recently, however, there has been a marked increase in research studying the psychology of the targets of prejudice, examining the impact of prejudice as well as targets’ perceptions and responses to prejudice and discrimination (for a review, see Crocker, Major, & Steele, 1998). This study seeks to add to

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our understanding of the target’s perspective by examining the role of psychological variables in the perception of discrimination.

Despite uncertainty about whether they reflect the real or actual amount of discrimination, perceptions of discrimination increasingly are being recognized as important psychological realities for ethnic minority group members (Dion & Kawakami, 1996). As Crocker and Major (1989) pointed out, the causes of negative encounters or experiences often may be unclear for people who belong to devalued groups. On the one hand, negative encounters with others could be a result of one’s lack of merit, inferior qualifications, poor performance, or other shortcomings. Alternatively, they could be a result of prejudice and discrimination based on one’s ethnic identity.

In his work examining perceived discrimination (PD) among ethnic minority adolescents, Verkuyten (1998) drew on social identity theory (e.g., Tajfel, 1982; Tajfel & Turner, 1986) to distinguish between group or ethnic self-esteem and personal self-esteem. His findings suggested a negative effect of PD on ethnic self-esteem, which in turn was related to personal self-esteem. In a further study, Verkuyten and Nekuee (1999) showed that PD leads to higher ethnic identification. This finding is similar to that reported by Branscombe et al. (1999), but, unlike Branscombe and her colleagues, Verkuyten found that higher ethnic identification had a negative rather than a positive effect on well-being.

Theoretical Framework

Based on the work of Lazarus and Folkman (1984), the present approach conceptualizes prejudice and discrimination as stressors in the lives of minority group members. Increasingly, researchers are recognizing the benefits of adopting models that conceptually integrate the experience of discrimination into the stress process (Allison, 1998; Clark, Anderson, Clark, & Williams, 1999; Miller & Kaiser, 2001; Slavin, Rainer, McCreary, & Gowda, 1991). One important benefit of these models is that they draw attention to the importance of cognitive appraisals in the experience of prejudice and discrimination. Lazarus and Folkman, for example, argued that psychological factors within the individual influence how he or she understands and evaluates stressors in natural settings. Thus, it is argued that personality characteristics and beliefs about oneself and the world will determine in part whether experiences will be interpreted as or attributed to discrimination.

Previous research has provided support for the role of a number of psychological factors in PD. Self-esteem has been linked to perceptions of age-related discrimination (Hassel & Perrewé, 1993) and ethnic discrimination (Phinney, Madden, & Santos, 1998). In both studies, individuals with low self-esteem reported higher levels of discrimination. Phinney et al. argued that a positive view of oneself (i.e., self-esteem) is related to a generally positive interpretation
of real-world events. Thus, possible slights would more likely be seen as misunderstandings than as deliberate discrimination. A related argument is that depression leads to a negative view of the world and a greater likelihood of seeing discrimination. Consistent with this idea is Phinney et al.’s finding that depression and anxiety predicted higher levels of perceived ethnic discrimination. In a study of gender discrimination, Kobrynowicz and Branscombe (1997) found that PD among women was related to depression, but not to self-esteem.

Another psychological variable that has been related to the perception of discrimination is need for social approval. Kobrynowicz and Branscombe (1997) found evidence to suggest that individuals with a high need for social approval are less likely to see or report personal discrimination. These authors argue that individuals may not report being discriminated against personally because of the social censure they expect to experience.

Research also suggests that factors specifically related to minority group membership may influence perceptions of discrimination. Crocker and Major (1989) hypothesized that the more central group membership is to an individual, the more likely he or she would be to make attributions to discrimination. While there is empirical evidence for a positive correlation between group identification and PD (e.g., Branscombe et al., 1999; Gurin & Townsend, 1986; Major, Quinton, & McCoy, 2002), there is some debate about the causal direction of this relationship. Recent experimental evidence, however, appears to suggest that increased group identification is both an outcome of and an antecedent to perceptions of discrimination (Branscombe et al., 1999; Major, Quinton, & Schmader, 2003).

The Current Study

Our study seeks to build on the existing work by investigating psychological predictors of perceived discrimination in a United Kingdom sample of ethnic minority young people. In particular, the study seeks to examine how a number of psychological variables interrelate to impact on perceptions of ethnic discrimination.

First, we seek to examine the relationship between self-esteem and PD. Does self-esteem have a direct effect on PD, or is its effect explained by its relationship with depression or anxiety? Kobrynowicz and Branscombe (1997) found a direct effect on PD of depression, but not of self-esteem, but their analysis did not test for an indirect effect of self-esteem mediated by depression. Phinney et al.’s (1998) findings suggested that individuals with lower self-esteem experienced more depression, and in turn perceived less discrimination. The study, however, did not test explicitly a mediated model of relations between self-esteem and PD. Moreover, Phinney et al. treated depression and anxiety as one construct.
Theoretical and empirical work suggest that anxiety and depression are characterized by distinctive features (Beck, 1976; Clark & Watson, 1991). Depression, for example, is associated with thoughts organized around themes of loss and personal deficiency, whereas anxiety is associated with thoughts focused on danger and future threat (Beck, 1976; Beck & Emery, 1985). Therefore, we predict a more direct relationship between anxiety and PD than between depression and PD.

Second, we seek to investigate whether the extent to which individuals’ need for others’ approval impacts on PD. Previous research has suggested a negative relationship between need for approval and PD (Kobrynowicz & Branscombe, 1997). However, clinical research on sociotropy also suggests a more complex pathway. Sociotropy, defined as a personality trait involving heightened concern about what others think and dependence on others’ approval, has been found to be positively correlated with general anxiety (e.g., Alford & Gerrity, 1995; Robins, Bagby, Rector, Lynch, & Kennedy, 1997) and social anxiety (Brown, Juster, Heimberg, & Winning, 1998). Thus, in investigating the nature of the relationship between need for approval and PD, we considered both direct and indirect effects; that is, whether need for approval is negatively associated with PD, and whether need for approval is positively associated with PD through its effect on anxiety.

Third, we aim to examine the relationship between ethnic identification and PD. We predict that ethnic identification will be positively associated with PD. We also examine separately the relationship between ethnic or collective self-esteem and PD. Consistent with social identity theory, we predict that collective self-esteem will have an effect on PD that is independent of personal self-esteem. Following Crocker and Luhtanen (1990), our measure of collective self-esteem distinguishes between public and private evaluations of ethnic group. We predict a stronger relationship with PD for public evaluation of ethnic group than for private evaluation.

Finally, we examine whether gender and ethnic group impact on PD. Some feminist theorists argue that ethnic minority women face double jeopardy because of ethnic discrimination and gender discrimination. According to the double-jeopardy hypothesis, ethnic minority women should experience or perceive more discrimination than ethnic minority men (Canales, 1997; Rakow & Wackwitz, 1998). There is little empirical evidence for this hypothesis. Some studies have reported no gender differences in PD (e.g., Dion & Kawakami, 1996; Phinney et al., 1998; Verkuyten & Nekuee, 1999). However, in a recent study of ethnic minority children in The Netherlands, Verkuyten and Thijs (2001) reported that girls did not perceive significantly more but significantly less peer victimization than did boys.

Our sample consists of young people in the United Kingdom drawn from three ethnic minority groups who might be expected to experience discrimination...
on the basis of their distinctiveness from the mainstream culture. Research has indicated that experience of ethnic discrimination among ethnic minorities in the UK is widespread (Karlsen & Nazroo, 2002; Virdee, 1995). In addition, such an examination of associated psychological factors is particularly timely, given that the UK government recently identified Black and ethnic minority individuals as a priority group for the promotion of mental health (Department of Health, 2002). Research has indicated that ethnic minority young people in particular are at increased risk of deprivation and social exclusion (Scottish Executive, 2001). In short, guided by Phinney et al. (1998) and the findings outlined earlier, we conducted a series of multiple regression analyses to identify the predictors of PD. These analyses were then followed by mediational analyses to further examine indirect effects on PD.

Method

Participants

The participants were 154 young people (69 male, 85 female), comprising 27 Chinese, 39 Indians, and 88 Pakistanis, all residents of the city of Glasgow, Scotland. These groups constitute the three largest ethnic minority groups in the city. The number of participants in each group is proportional to the numbers in the city as a whole. We recruited young people from three age groups: 14 to 15 years, 17 to 18 years, and 20 to 21 years. All of the youngest cohort participants were attending school. Of the two older cohorts, 81% (n = 63) were in full-time education (secondary, further or higher education), 15% (n = 12) were employed, and 4% (n = 3) were unemployed. These participants form part of a larger sample that also includes young people who are White and from other ethnic minority groups.

Participants were recruited in a number of ways. For those in the youngest age cohort, education authorities guided the selection of a large number of secondary schools as representing schools in the city of Glasgow enrolling ethnic minority pupils. These schools were contacted and invited to participate in a longitudinal study examining life experiences of ethnic minority young people. In schools that agreed to take part, the school authorities selected participants randomly.

Pupils were informed that their participation was voluntary, that their responses were confidential, and that they could withdraw from the study without penalty at any time. Parental consent forms were issued to all interested participants. Participants in the older two cohorts were recruited primarily by targeting names selected randomly from local government and electoral registers. Additional recruitment was through local organizations and community groups to ensure a match with the youngest cohort in terms of gender, ethnicity, and area of
residence. In all age groups, we recruited participants from across the geographical environs of the city of Glasgow.

**Measures**

Measures were taken, either directly or with modification, from existing scales. Measures assessing aspects of the personal self-concept were presented to participants before the measures focusing on the group or collective self-concept. To minimize contamination, the measure of perceived discrimination was completed last.

**Depression and anxiety.** Depression and anxiety were measured using the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). The HADS consists of 14 items, with 7 corresponding to the anxiety subscale (e.g., “Worrying thoughts go through my mind”) and 7 corresponding to the depression subscale (e.g., “I have lost interest in my appearance”). The maximum score for each scale is 21. Both subscales are reliable and valid and are suitable for use in the general population (Aylard, Gooding, McKenna, & Snaith, 1987; Crawford, Henry, Crombie, & Taylor, 2001; Moorey, Greer, & Watson, 1991). Cronbach’s alpha coefficient was computed for each of the subscales (anxiety, $\alpha = .73$; depression, $\alpha = .61$).

**Personal self-esteem.** Personal self-esteem was measured using Rosenberg’s (1979) Self-Esteem scale, a well-validated measure of global personal self-esteem. The scale consists of 10 items (e.g., “I feel that I have a number of good qualities”) measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The maximum score is 50, and the coefficient alpha for this sample was .80.

**Need for approval.** The Need for Approval scale was developed by Crocker and Quinn (1998) to measure the extent to which self-esteem is contingent on approval and regard from others. The scale consists of 10 items measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items include “It is important to me to be well thought of by others” and “My self-esteem gets a boost when I receive a compliment or praise.” The maximum score is 50, and the coefficient alpha for this sample was .73.

**Ethnic identification.** The ethnic identification measure combines one item measuring importance of ethnic identity with two items from the affirmation/belonging subscale of Phinney’s (1992) Multigroup Ethnic Identity Measure (MEIM). The identity importance measure asks participants to rate the importance of their ethnic group on a 10-point scale ranging from 1 (not at all important) to 10 (of great importance). The two items from the MEIM are “I have a strong sense of belonging to my ethnic group” and “I feel a strong attachment towards my ethnic group.” These items are rated on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree). Because of differences in the scales...
used, all three items were standardized before being combined. The coefficient alpha for this sample was .80.

**Collective self-esteem.** The collective self-esteem measure examines how individuals evaluate the ethnic group with which they identify. The scale is a modified version of the Collective Self-Esteem (CSE) scale (Crocker & Luhtanen, 1990). Three 4-item subscales measure (a) private CSE (i.e., how positively they judge their ethnic group; e.g., “In general, I am glad to be a member of my ethnic group”); (b) public CSE (i.e., how other people evaluate their ethnic group; e.g., “Overall, my ethnic group is considered good by others”); and (c) membership self-esteem (i.e., how good or worthy a member they are of their ethnic group; e.g., “I am a worthy member of my ethnic group”).

We did not use the identity importance subscale from the CSE (Crocker & Luhtanen, 1990) because it overlaps too strongly with the ethnic identification measure (Branscombe et al., 1999). Items are rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The maximum score for each subscale is 28. The coefficient alpha was computed for each four-item subscale and was .79 for private CSE, .68 for public CSE, and .71 for membership self-esteem.

**Perceived discrimination.** The PD scale is based on two measures, one used by Verkuyten (1998) and one developed by Phinney et al. (1998). The scale consists of six items: Two assess perceived frequency of being treated unfairly or negatively because of one’s ethnic background at school and outside school (e.g., “How often are you called names and teased in school because of your ethnic background?”), and four assess feeling unaccepted in society because of one’s ethnicity (e.g., “How often are you ignored or excluded because of your ethnic background?”). Each item is rated on a 7-point scale ranging from 1 (almost never) to 7 (very often). The maximum score is 42, and the coefficient alpha for this sample was .82.

**Procedure**

The scales were administered in the second part of a two-stage interview. The first part considered participants’ life experience across domains such as education (or employment), family, leisure, and identity; data from this part are not reported here. The first part of the interview took approximately 30 min, and the second part took approximately 20 min. Interviews and questionnaire completion took place on school premises with the youngest cohort; and in a variety of venues, including university premises, local secondary schools, and community centers for the older two cohorts. Participants in the older two cohorts were paid £5

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3This question was asked in the past tense for those participants who were no longer attending school.
PERCEIVED DISCRIMINATION AMONG ETHNIC MINORITIES

(abbrev. US$8.50) for their participation and any traveling expenses incurred to attend the interview.

Results

A series of $3 \times 2 \times 3$ (Ethnicity $\times$ Gender $\times$ Age Group) ANOVAs were conducted to determine differences by ethnic group, gender, and age on the psychological variables. The only significant differences to emerge were in relation to PD, and membership CSE. There was a significant effect of gender for PD, $F(1, 153) = 4.87, p < .05$; with male participants ($M = 19.78, SD = 7.50$) perceiving more discrimination than female participants ($M = 17.29, SD = 19.78$). A significant Gender $\times$ Ethnicity interaction was also found, $F(2, 152) = 2.80, p < .01$. Post hoc Bonferroni tests suggest that the significant effect of gender held for Indian participants only ($p < .05$), with female participants ($M = 13.33$) in the Indian group perceiving less discrimination than their male counterparts ($M = 20.61$). There were no significant gender differences in the Pakistani or Chinese groups. For membership CSE, there was a main effect of ethnicity only, $F(2, 152) = 3.57, p < .05$. Post hoc analysis reveals that the significant difference was between Chinese and Indian participants only. Indian participants reported higher levels of membership CSE ($M = 20.16$) than did Chinese participants ($M = 17.24, p < .05$).

Bivariate zero-order correlations among all of the variables are shown in Table 1. PD was significantly related to all of the psychological measures except ethnic identification, and to gender but not to ethnicity. The psychological measures, with the exception of need for approval and ethnic identification, were generally interrelated.

In line with Phinney et al. (1998), an initial multiple regression was carried out, using PD as the outcome and the psychological variables (personal self-esteem; ethnic identification; depression; anxiety; need for approval; and private, public, and membership CSE) as predictors. Gender and ethnicity also were included as predictor variables. The results of this regression analysis are shown in Table 2. There were three significant predictors: gender, anxiety, and public CSE, which together accounted for 25% of the variance in PD, $F(10, 152) = 4.74, p < .001$. Male participants reported more PD than did female participants. Those participants reporting more anxiety perceived more discrimination; those reporting more public CSE perceived less discrimination.

To determine the factors accounting for the predictors of PD, two further regression analyses were carried out. All of the psychological variables, ethnicity, and gender were included in these analyses as well as either anxiety or public CSE, depending on which of the two was being predicted. The results are shown in Table 3 for anxiety and in Table 4 for public CSE. The significant predictors of anxiety were depression, personal self-esteem, and need for approval. Those
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<th>10</th>
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<td>1. Gender</td>
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<td>2. Ethnicity</td>
<td>.04</td>
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<td>3. Anxiety</td>
<td>.14</td>
<td>.05</td>
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<td>4. Depression</td>
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<td>.04</td>
<td>.38***</td>
<td>—</td>
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<td>5. Personal self-esteem</td>
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<td>-.17*</td>
<td>-.36***</td>
<td>-.40***</td>
<td>—</td>
<td></td>
<td></td>
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<tr>
<td>6. Need for approval</td>
<td>.13</td>
<td>.05</td>
<td>.37***</td>
<td>.17*</td>
<td>-.23**</td>
<td>—</td>
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<td>-.10</td>
<td>-.06</td>
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<td>.09</td>
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<tr>
<td>8. Private CSE</td>
<td>.00</td>
<td>-.14</td>
<td>-.17*</td>
<td>-.18*</td>
<td>.33***</td>
<td>-.05</td>
<td>.56***</td>
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<td>9. Public CSE</td>
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<td>-.02</td>
<td>-.10</td>
<td>-.20*</td>
<td>.29***</td>
<td>-.08</td>
<td>.11</td>
<td>.37***</td>
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<td>10. Membership CSE</td>
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<td>-.22**</td>
<td>-.18*</td>
<td>-.07</td>
<td>.32***</td>
<td>-.12</td>
<td>.41***</td>
<td>.46***</td>
<td>.24**</td>
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<td>11. Perceived discrimination</td>
<td>-.17*</td>
<td>.02</td>
<td>.24**</td>
<td>.21*</td>
<td>-.20*</td>
<td>.20*</td>
<td>-.02*</td>
<td>-.18*</td>
<td>-.39***</td>
<td>-.18*</td>
</tr>
</tbody>
</table>

*Note.* CSE = collective self-esteem.

*p < .05. **p < .01. ***p < .001.
Table 2

**Simultaneous Regression Analysis Predicting Perceived Discrimination**

<table>
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<td>Membership CSE</td>
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<td>-0.10</td>
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</table>

*p < .05. **p < .01. ***p < .001.*

Table 3

**Simultaneous Regression Analysis Predicting Anxiety**

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<td>0.10</td>
<td>0.25**</td>
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<tr>
<td>Personal self-esteem</td>
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<td>0.07</td>
<td>-0.23**</td>
</tr>
<tr>
<td>Need for approval</td>
<td>0.19</td>
<td>0.06</td>
<td>0.25**</td>
</tr>
<tr>
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<td>-0.08</td>
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<tr>
<td>Private CSE</td>
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<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Public CSE</td>
<td>0.02</td>
<td>0.04</td>
<td>0.05</td>
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<tr>
<td>Membership CSE</td>
<td>-0.02</td>
<td>0.04</td>
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**p < .01.*
Table 4

Simultaneous Regression Analysis Predicting Public Collective Self-Esteem

<table>
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<td>Depression</td>
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<td>Personal self-esteem</td>
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<td>-0.12</td>
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<tr>
<td>Private CSE</td>
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<td>0.11</td>
<td>0.35**</td>
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<tr>
<td>Membership CSE</td>
<td>0.11</td>
<td>0.09</td>
<td>0.11</td>
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Note. $N = 154$. $R^2 = .20$, $F(9, 152) = 3.95, p < .001$. CSE = collective self-esteem. **$p < .01$. 

young people with higher scores on depression and need for approval had higher levels of anxiety. In addition, young people with higher personal self-esteem had lower levels of anxiety.

For public CSE, the only predictor was private CSE. Young people with higher private CSE reported higher public CSE. Gender had no significant effect on any of the psychological predictors of PD. In addition, ethnic identification had no effect on any of the variables in the model.

We then conducted a series of mediation analyses that are shown in Table 5. First, we tested a mediated model of relations between self-esteem and PD. Because a direct effect of depression on PD was not indicated in the initial regression analysis (Table 2), we examined an anxiety-mediated model. Our findings suggest that the three preconditions for mediation identified by Baron and Kenny (1986) were met. First, personal self-esteem was significantly related to anxiety ($r = -.36$, $p < .001$). Second, anxiety significantly predicted PD, uniquely accounting for 6% of the variance, $F(1, 152) = 9.22$, $p < .01$. Finally, although personal self-esteem was a significant predictor of PD ($r^2 = .04$), $F(1, 152) = 6.07$, $p < .05$, personal self-esteem did not account for a significant proportion of the variance above and beyond that accounted for by anxiety.

We also examined anxiety-mediated models for depression and need for approval. Again, the findings suggest that their relationship with PD was mediated by anxiety. Depression and need for approval were both significantly related to anxiety ($r = .37$, $p < .001; r = .38$, $p < .001$). As stated previously, anxiety
### Table 5

**Mediation Analyses: Predicting Perceived Discrimination**

<table>
<thead>
<tr>
<th>Order of entry</th>
<th>Predictor</th>
<th>Cumulative $R^2$</th>
<th>Increment in $R^2$ for step</th>
<th>$F$ for increment in step</th>
<th>$df$</th>
<th>Partial correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Anxiety</td>
<td>.06</td>
<td>.06</td>
<td>9.22, $p &lt; .01$</td>
<td>1, 151</td>
<td>.24</td>
</tr>
<tr>
<td>Step 2</td>
<td>Personal self-esteem</td>
<td>.07</td>
<td>.01</td>
<td>2.06, $ns$</td>
<td>1, 150</td>
<td>-.12</td>
</tr>
<tr>
<td>Step 1</td>
<td>Anxiety</td>
<td>.06</td>
<td>.06</td>
<td>9.22, $p &lt; .01$</td>
<td>1, 151</td>
<td>.24</td>
</tr>
<tr>
<td>Step 2</td>
<td>Depression</td>
<td>.07</td>
<td>.02</td>
<td>2.72, $ns$</td>
<td>1, 150</td>
<td>.13</td>
</tr>
<tr>
<td>Step 1</td>
<td>Anxiety</td>
<td>.06</td>
<td>.06</td>
<td>9.22, $p &lt; .01$</td>
<td>1, 151</td>
<td>.24</td>
</tr>
<tr>
<td>Step 2</td>
<td>Need for approval</td>
<td>.07</td>
<td>.02</td>
<td>2.58, $ns$</td>
<td>1, 150</td>
<td>.13</td>
</tr>
<tr>
<td>Step 1</td>
<td>Public CSE</td>
<td>.15</td>
<td>.15</td>
<td>26.56, $p &lt; .001$</td>
<td>1, 151</td>
<td>-.35</td>
</tr>
<tr>
<td>Step 2</td>
<td>Private CSE</td>
<td>.15</td>
<td>.00</td>
<td>0.27, $ns$</td>
<td>1, 150</td>
<td>-.04</td>
</tr>
</tbody>
</table>

*Note. CSE = Collective self-esteem.*
Figure 1. Path analytic model predicting perceived discrimination. CSE = collective self-esteem. *p < .05. **p < .01. ***p < .001.

significantly predicted PD. Although depression, $r^2 = .04$, $F(1, 152) = 6.54$, $p < .05$, and need for approval, $r^2 = .04$, $F(1, 152) = 6.94$, $p < .01$, significantly predicted PD, neither accounted for a significant proportion of the variance above and beyond that accounted for by anxiety.

Finally, we examined a model treating public CSE as a mediator of the relationship between private CSE and PD. Consistent with a mediated model, private CSE was significantly related to public CSE ($r = .37$, $p < .001$). Public CSE significantly predicted PD, uniquely accounting for 15% of the variance, $F(1, 152) = 6.07$, $p < .05$. Finally, although private CSE significantly predicted PD ($r^2 = .03$), $F(1, 152) = 5.09$, $p < .05$, it failed to account for a significant proportion of the variance above and beyond that accounted for by public CSE.

Consistent with Phinney et al. (1998), a path model for influences on PD was constructed, including only the significant predictors. The model is shown in Figure 1 and is based on the regression equations shown in Tables 2, 3, and 4. Partial correlation coefficients show the relative effects of the predictor variables on the endogenous variables, with the other variables influencing them held statistically constant. The model shows three pathways leading to PD. In the first pathway, gender has a direct effect on PD. In the second pathway, anxiety was predicted by personal self-esteem, depression, and need for approval; anxiety, in turn, predicted PD. Finally, the third pathway shows private CSE positively predicting public CSE, which, in turn, negatively predicted PD. While there was
no effect of ethnicity in any of the regression analyses, it was not possible to
determine definitively whether the model provided an equally good fit for all
three ethnic groups because of insufficient numbers.

Discussion

The present study extended the literature by successfully identifying the
factors that influence the extent to which ethnic minority young people in the
United Kingdom perceive discrimination. ANOVA suggests a main effect of
gender, with male participants reporting more PD than female participants. A
series of multiple regression analyses yielded a direct effect of gender on PD.
This pathway was one of three leading to PD. Depression, low personal self-
esteeem, and need for approval predicted anxiety, which was related to higher PD.
Private CSE was positively associated with public CSE, which in turn predicted
lower PD.

The gender difference in PD is not consistent with previous studies (Dion &
Kawakami, 1996; Phinney et al., 1998; Verkuyten & Nekuee, 1999), which found
no differences between men and women in PD. While the gender difference is in
the opposite direction to that predicted by the double-jeopardy hypothesis, a sim-
ilar finding was reported by Verkuyten and Thijs (2001). Relatively few studies
have tested empirically the double-jeopardy hypothesis, and our findings suggest
the need for further research on this question.

One explanation for the inconsistent findings in relation to gender might
reflect differences between ethnic groups. In our study, the gender difference was
obtained for Indian participants only, and we have observed a similar pattern
among the White majority group in our sample. White female participants
reported lower levels of PD than did their male counterparts, t(90) = 1.95, p =
.055. There is accumulating evidence that the Indian community is better inte-
grated into UK mainstream culture than are other ethnic minority groups. Data
suggest that the Indian socioeconomic profile is more comparable to the domi-
nant White population (Blackaby, Leslie, Murphy, & O‘Leary, 1999). Analysis of
housing data suggests that Indians are significantly less segregated from Whites
than are other ethnic minority groups (Peach, 1998). Furthermore, the fourth
Policy Studies Institute study records 79% of Pakistani women as always wear-
ing Asian dress, double the rate of predominantly non-Muslim Indian women
(Modood et al., 1997).

As predicted, our findings suggest a stronger relationship between anxiety
and PD than between depression and PD, and that the relationship between
depression and PD is mediated by anxiety. This finding supports the conceptual
distinction between these two measures of affect. Moreover, this finding is con-
sistent with work that has established a relationship with social fears and
low perceived competence in the social domain (e.g., Smári, Pétursdóttir, &
Porsteinsdóttir, 2001). Our findings further suggest an anxiety-mediated model for personal self-esteem. Phinney et al. (1998) also found an indirect effect of personal self-esteem, but our results suggest that this indirect effect on PD is mediated by anxiety, rather than by depression.

Our findings failed to support the hypothesis that need for approval is related negatively to perceptions of discrimination. There was support, however, for an indirect effect of need for approval on PD as mediated by anxiety. Individuals with a higher need for approval reported higher levels of anxiety, and in turn perceived more discrimination. This finding has parallels in clinical research suggesting a link between sociotropy or excessive need for approval and anxiety (Alford & Gerrity, 1995; Robins et al., 1997). Beck (1983) suggested that sociotropy functions like a cognitive schema hypothesized to guide information processing. Thus, it is possible that individuals with higher need for approval are more likely to attend to negative cues in their social environment. Crocker and her colleagues (Crocker & Quinn, 1998; Quinn & Crocker, 1999) argued that need for approval mediates the relationship between PD and psychological distress. Their findings have suggested that people whose self-esteem is relatively independent of approval and regard from others are less vulnerable to prejudice. Our finding extends Crocker’s work by suggesting that need for approval is not only a mediator in the PD–distress relationship, but also an antecedent of perceptions of discrimination.

Contrary to our hypothesis, ethnic identification was unrelated to PD. While this finding failed to support previous studies suggesting a link (Branscombe et al., 1999; Major et al., 2003), it consistent with Phinney et al.’s (1998) study. Verkuyten (1998) suggested that Phinney et al.’s finding is not surprising because, similar to the present study, Phinney et al. measured PD at the personal level, rather than at the group level. Verkuyten argued that ethnic identity factors will be related to perceived group discrimination only. He made a distinction between personal and ethnic or collective self-esteem, and between personal and group discrimination. Personal self-esteem will be related to perceived personal discrimination while ethnic self-esteem will be related to perceived group discrimination. Unlike Phinney et al., however, we also included a measure of CSE. Contrary to Verkuyten, a pathway from CSE (private and public) to perceived personal discrimination was indicated. Our findings suggest the importance of distinguishing between ethnic identification and both private and public evaluations of ethnic group.

Three methodological issues require comment. First, because the present study was correlational, the direction of the effects cannot be determined. It is possible that PD may also affect subjective well-being, for example. Researchers have investigated and emphasized both directions of the relationship because it is highly unlikely that the relationship is unidirectional (Verkuyten, 1998). The recent experimental study by Verkuyten and Thijs (2001) distinguished between
trait and state self-esteem. Their findings showed that children with higher trait self-esteem reported less peer victimization, but that peer victimization in turn had a negative effect on momentary self-feelings. Longitudinal analysis is required to investigate further the possibility of bidirectional or interactive relationships linking PD and subjective well-being. We argue, however, that an approach examining the impact of psychological factors on PD has particular utility in explaining observed differences in PD within ethnic and other minority groups. Additionally, directionality cannot be disputed in the relationship observed between gender and PD, which further supports our view that PD should be studied as an outcome as well as a predictor variable.

Second, although one could argue that two of our measures do not meet Nunnally's (1978) criterion of internal consistency, we suggest that this perceived lack of reliability would only act to attenuate the strength of the relationships between the variables. What is more, the measures in question have good validity. For example, in a recent review of the literature (including some 747 papers), it was concluded that the HADS (Zigmond & Snaith, 1983) performs well in assessing depression and anxiety across populations; it has good discriminant and construct validity (Bjelland, Dahl, Haug, & Neckelmann, 2002).

Third, we acknowledge that there may be an issue in relation to the representativeness of the present sample. While our sample accurately reflects the numerical representation of the three ethnic groups in this population and random sampling techniques were used where possible, there are inherent difficulties in sampling ethnic minority populations (e.g., Hughes, Fenton, Hine, Pilgrim, & Tibbs, 1995). In addition, it was necessary in this study to recruit a proportion of those in the older cohorts on a nonrandom basis. Thus, our claims in relation to the generalizability of our findings are made with caution. A related issue is the small sample sizes of the three ethnic groups, which may have reduced statistical power to probe intergroup differences. While the main focus of this study was on ethnic minority youth more generally, future studies with significantly increased sample sizes are required to tease out patterns associated with specific ethnic minority groups, which otherwise may not be evident.

In conclusion, our findings show that research on PD among ethnic minority groups should pay systematic attention to personal and collective or group factors. It appears that these two aspects have their own, separate pathways leading to PD. Our findings also enhance our understanding of the complex relationships between self-esteem, affect, and PD. Moreover, policy implications should not be underestimated; our findings suggest that psychological factors, irrespective of actual levels of discrimination, can predict one's perceptions of discrimination. Interventions aimed at targeting such factors ought to be explored. Future research in this area will provide a better understanding of the psychological impact of membership in an ethnic minority and inform interventions aimed at reducing discrimination and its consequences.
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